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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,191	02/06/2004	James T. Hamilton	2026/41553/I	7211

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EXAMINER

ALIE, GHASSEM

ART UNIT PAPER NUMBER

3724

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Tata

Office Action Summary	Application No. 10/774,191	Applicant(s) HAMILTON ET AL.	
	Examiner Ghassem Alie	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-31 is/are pending in the application.
- 4a) Of the above claim(s) 30 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21, 25, and 29, are rejected under 35 U.S.C. 103(a) as being unpatentable over Leanna (4,831,930) in view of Fukuyama (3,897,2921). Regarding claims 21 and 25, Leanna teaches a rotary cutting die 14-16, 22 mountable on a metal cylinder 12. The core metal core 12 defines the metal cylinder and the saddle located around the periphery of the cylinder 12 defines the rotary die cutting. Permanent magnet 14, spacers 15, magnetic poles 16, and the cutting die plate 22 define the saddle. Leanna also teaches the rotary die plate 20 has an inner surface and an outer surface and the inner surface is magnetically attractable and magnetically mountable on metal cylinder 12. Leanna also teaches a cutting blade 23 mounted on the outer surface of rotary die pate 14-16, 22. Leanna also teaches that rotary die plate is configured such that the rotary cutting die is mountable on the metal cylinder. Leanna also teaches that rotary die plate 14-16, 22 is formed of a solidified resin having a plurality of magnetic elements 14, 16. See Fig. 1-10 and col. 1, lines 7-47 and col. 4, lines 1-68 in Leanna. Leanna does not explicitly teach that the magnetic elements are disposed within the resin and the rotary die is contactably mountable con the metal cylinder without having to use mechanical holding devices including screws and clamps. However, Fukuyama teaches a rotary die plate 2 contactably mountable on a metal cylinder 1 without having to use mechanical holding devices including screws and clamps. See Figs. 1-3 in Fukuyama.

Fukuyama also teaches that the rotary die plate 2 is formed of a solidified resin and a plurality of magnetic elements 6 disposed within the resin. Magnetic elements 6 are disposed within the base layer 4, which is composed of fibrous layer impregnated with a thermosetting resin, and a layer 7 which is also composed of a thermosetting resin. Therefore, magnetic elements 5 are disposed within the resin. See Figs. 1-3 and col. 3, lines 26-50 in Fukuyama. It would have been obvious to a person of ordinary skill in the art to provide Leanna's rotary die plate with the arrangement of the magnetic elements and non-magnetic elements, as taught by Fukuyama, in order to mount the rotary die plate on the metal cylinder without the use of mechanical holding devices.

Regarding claim 29, Leanna, as modified by Fukuyama, teaches everything noted above including a magnetic member on metal cylinder 12 in contact with the rotary cutting die. It should be noted that Leanna teaches that the saddle is wrapped around the cylinder 12. Fukuyama teaches that more than one saddle is needed to fill the circumferential area of a metal cylinder such as taught in Leanna. This is evident in Clifton et al. (3,66,752). The adjacent saddles are in contact with one another. Therefore, one of the saddles, which is defined as a magnetic member, reduces the creeping of the adjacent saddle or the rotary cutting die.

3. Claims 22, 24, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leanna in view of Fukuyama, as applied to claims 21 and 25, and in further view of Huang (2003/0209112). Regarding claims 22, 24, 26, and 28, Leanna, as modified by Fukuyama, teaches everything noted above except that the magnet elements are neodymium magnets. However, the use of neodymium magnets to mount a surface on a metallic surface

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is well known in the art such as taught by Huang. Huang teaches neodymium magnetic elements 13, 22 for mounting a surface to a metallic surface 41. See Figs. 1-3 and page 1, paragraph 16 in Huang. It would have been obvious to a person of ordinary skill in the art to form the magnetic elements of Leanna's rotary die plate, as modified by Fukuyama, from neodymium magnets as taught by Huang in order to ensure a strong bound between the die plate and the metal cylinder since the metal neodymium magnets have strong magnetic attraction.

4. Claims 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leanna in view of Fukuyama, as applied to claims 21 and 25, and in further view of Kapolnek (6,067,887). Regarding claims 23 and 27, Leanna, as modified by Fukuyama, teaches everything noted above except that the cutting blade having edge which extends at least 0.125 inches above an outer surface of the rotary die plate. However, Kapolnek teaches a the cutting blade 12 having a cutting edge 16 that extends 0.125 inches above an outer surface 18 of a rotary die plate 14. See Fig. 1 and col. 3, lines 23-40 in Kapolnek. It would have been obvious to a person of ordinary skill in the art to provide Leanna's rotary die plate, as modified by Fukuyama, with the cutting blade as taught by Kapolnek in order to use the rotary cutting blade for cutting a specific type of material that has a specific thickness.

Response to Amendment

5. Applicant's arguments with respect to claims 21-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to

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applicant's disclosure.

Taylor (5,711,223), Pugh et al. (3,824,927), Cavazos (5,938,579), and Welch, Jr. (3,670,646)

teach a die rotary plate magnetically attached to a metal cylinder.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501.

The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (too-free).



Allan N. Shoap
Supervisory Patent Examiner
Group 3700

GA/ga

October 7, 2005